NEET : CHAPTER WISE TEST-15

SUBJECT :- BIOLOGY **DATE.....**
CLASS :- 11th **NAME.....**
CHAPTER :- BODY FLUIDS & CIRCULATION **SECTION.....**

(SECTION-A)

1. RBCs have an average life span of 120 days after which they are destroyed in_____.
(A) Spleen (B) Pancreas
(C) Kidney (D) Stomach

2. Identity the wrong statement w.r.t. human RBCs.
(A) They are devoid of nucleus.
(B) They are biconvex in shape.
(C) They have iron-containing complex protein called haemoglobin.
(D) They are formed in the red bone marrow in the adults.

3. _____and_____ are phagocytic cells which destroy foreign organisms entering the body.
(A) Neutrophils, lymphocytes
(B) Neutrophils, monocytes
(C) Basophils, lymphocytes
(D) Eosinophils, lymphocytes

4. _____secrete histamine, serotonin, heparin, etc. and are involved in inflammatory reactions.
(A) Eosinophils (B) Basophils
(C) Neutrophils (D) Monocytes

5. Find the correct ascending order of percentage proportion of leucocytes in human blood.
(A) Lymphocytes → Neutrophils → Basophils → Acidophils → Monocytes
(B) Basophils → Eosinophils → Monocytes → Lymphocytes → Neutrophils
(C) Basophils → Monocytes → Eosinophils → Lymphocytes → Neutrophils
(D) Monocytes → Basophils → Eosinophils → Neutrophils → Lymphocytes

6. A drop of each of the following is placed on four different slides. Which one of the following does not clot?
(A) Blood sample from aorta.
(B) Blood sample from interior vena cava.
(C) Blood plasma.
(D) Serum.

7. Blood groups are identified by the agglutination tests using antiserum. Thus, if the blood sample shows coagulation with
(A) Antiserum A, the blood group is B
(B) Antiserum B, the blood group is A
(C) Antiserum A and B, the blood group is O
(D) Antiserum B, the blood group is B

8. Which of the following is incorrect w.r.t. blood clotting?
(A) Injury to the tissue releases thromboplastin.
(B) Calcium is essential for clotting mechanism.
(C) Prothrombin catalyzes conversion of fibrinogen to fibrin.
(D) Clotting pathway involves cascade of processes involving several clotting factors.

9. Which of the following is an incorrect statement w.r.t. erythrocyte?
(A) The life span of human RBCs is around 120 days.
(B) The size of human RBCs is 7-8 µm.
(C) Human RBCs are oval, biconvex and enucleated.
(D) Rise in RBC count is called polycythemia.

10. _____ are called polymorphonuclear leucocytes (PMNL).
(A) Monocytes (B) Neutrophils
(C) Lymphocytes (D) Basophils

11. Patient with blood group B can receive blood from donors of blood groups
(A) B and A (B) B and AB
(C) B and O (D) A and O

12. Identify the wrong statement w.r.t. blood groups.
(A) Rhesus antigen is present on the surface of RBCs.
(B) Blood group AB is the universal recipient.
(C) Blood group AB was discovered by Landsteiner.
(D) Persons with blood group AB do not have antibodies in their plasma.

13. Read the following statements:
(i) The enzyme plasmin is responsible for lysis of fibrin during fibrinolysis.
(ii) Lymph has abundant WBCs and mostly lymphocytes.
(iii) Predatory animals like tigers can coagulate blood by hydrolyzing fibrinogen to fibrin using trypsin.
(iv) The life span of platelets is about 1 month.
(v) Serum is plasma with clotting factors like fibrinogen
Which of the above statements are incorrect?
(A) (i) and (ii) (B) (ii) and (iii)
(C) (iii) and (iv) (D) (iv) and (v)

14. Select the incorrect statement from the following:
(A) Abnormal high platelet count in blood is called thrombocytopenia.
(B) The ratio of RBC: WBC in blood is 600: 1.
(C) Platelets are useful in blood clotting mechanism.
(D) Albumins are the most abundant plasma proteins

15. Which of the following are the largest WBCs?
(A) Monocytes (B) Neutrophils
(C) Basophils (D) Lymphocytes

16. Bursa of Fabricius is the site of _____ and found in birds, dorsal to the cloaca.
(A) Urea synthesis
(B) B-cell generation
(C) Fatty acid synthesis
(D) Glycogen synthesi

17. Kidneys secrete a hormone called_____ to promote synthesis of erythrocytes
(A) Gastrin
(B) Erythropoietin
(C) Glucagon
(D) Growth hormone

18. The function of lymph is to
(A) Carry oxygen from lungs to tissues
(B) Return the interstitial fluid to blood
(C) Synthesize prothrombin
(D) Form platelets from megakaryocytes

19. Patients with dengue fever have
(A) Significant fall in WBC count
(B) Significant fall in RBC count
(C) Significant fall in platelet count
(D) Significant rise in platelet count

20. The blood cells that provide humoral immunity by synthesis of antibodies, are
(A) T-lymphocytes (B) B-lymphocytes
(C) Basophils (D) Monocytes

21. Identify the correct option w.r.t. lymphatic system.
(A) Lymph carries nutrients, hormones, metabolic wastes but not the respiratory gases.
(B) Lymph cannot coagulate.
(C) The lymphatic ducts drain the lymph into subclavian veins of systemic circulatory system.
(D) Lymph is rich in RBCs, platelets and has higher protein concentration than blood.

22. A person with B blood group can possibly donate blood, to be used by patients with which of the following blood groups?
(A) AB^+ and O^-
(B) Only B^-
(C) B^- and AB^- only
(D) B^+, B^-, AB^+ and A B^-

23. A Rh –ve mother gave birth to her first baby who is Rh +ve. To prevent haemolytic disease in her second foetus, she should be immediately administered with
(A) Rh antigen (B) Steroids
(C) Anti-Rh antibodies (D) Bone marrow

24. Blood group 'O' negative is called universal donor,because it
(A) Has Rh antigen on its RBCs
(B) Does not have antigen 'A' or 'B' on RBCs
(C) Has anti-A and anti-B antibodies on RBCs
(D) Has antigen 'A' and antigen 'B' on RBCs

25. Identify the incorrect option w.r.t. lymphatic system.
(A) Lymph has lower protein concentration than plasma.
(B) Lymph capillaries are closed-ended vessels.
(C) The lymph nodes filter the lymph.
(D) Digested end products of carbohydrates and proteins are absorbed in lymph while fats are absorbed in blood.

26. Complete the following reaction:
$\text{Prothrombin} \xrightarrow{A} \text{Thrombin}$
$B \xrightarrow{\text{Thrombin}} \text{Fibrin}$
Choose the correct option w.r.t. A and B:
(A) A –Thromboplastin, B–Fibrinogen
(B) A – Thrombokinase, B – Fibrinogen
(C) A– Fibrinogen, B–Calcium
(D) A – Thromboplastin, B – Calcium

27. 'Bundle of His' in heart refers to
(A) Nervous tissue supplied to ventricles
(B) Muscular tissue supplied to ventricles
(C) Muscles supplied to atria
(D) Nerves regulating opening and closing atrioventricular valves

28. Stethoscope is used to hear heart sounds produced during cardiac cycle. The second heart sound is heard when
(A) AV valves open
(B) AV node receives signal from SA node
(C) Atria contract to push blood into ventricles
(D) Semilunar valves close down after the blood flows into vessels from ventricles

29. If due to some injury the chordae tendineae of the tricuspid valves of the human heart becomes non- functional partially, then it will result in
(A) Slowing down of blood flow into aorta
(B) Slowing down of blood flow into pulmonary
(C) Backflow of blood into left atrium due to close artery
(D) Slowing down of impulse generation by SA node

30. Which of the following is an incorrect statement w.r.t. the events of cardiac cycle?
(A) The duration of joint diastole is 0.4 second.
(B) Fall in ventricular pressure leads to closing of semilunar valves in the beginning of ventricular diastole.
(C) The duration of atrial systole is shorter than ventricular diastole.
(D) The atrioventricular valves remain open during ventricular systole.

31. Identify the wrong statement w.r.t. the human heart.
(A) It is mesodermally derived organ.
(B) It has the size of clenched fist.
(C) It is protected by a double-walled membranous bag called pleura.
(D) It is situated in thoracic cavity in between the two lungs, slightly tilted to the left.

32. During pulmonary circulation
(A) Oxygenated blood is carried by pulmonary veins to left atrium
(B) Deoxygenated blood is pumped by right ventricle to lungs through pulmonary arteries
(C) Deoxygenated blood returned to right atrium through vena cavae
(D) More than one option is correct

33. Find the mismatch from the following:
(A) Left atrium---Receives oxygenated blood from lungs through two pulmonary veins
(B) Right ventricle--Pumps deoxygenated blood to lungs through pulmonary arteries
(C) Right atrium--Receives deoxygenated blood from coronary sinus, and the two vena cavae
(D) Left ventricle--Pumps oxygenated blood to the body through aorta

34. Which of the following is/are observed at the end of joint diastole?
(A) 70% of ventricular filling has occurred
(B) P-wave appears on ECG
(C) SA node generates another impulse to cause atrial systole
(D) All of the above

35. Identify the conducting cardiac musculature that passes through the interventricular septum.
(A) Purkinje fibres
(B) Sinoatrial node
(C) Chordae tendineae
(D) Bundle of His

(SECTION-B)

36. The duration between the first and second heart sounds is
(A) 0.5 second (B) 0.3 second
(C) 0.1 second (D) 0.7 second

37. Hole in the interatrial septum to shunt oxygenated blood from right to left atria during foetal life in heart is called
(A) Fossa ovalis
(B) Foramen ovale
(C) Ductus arteriosus
(D) Ligamentum arteriosus

38. Identify the incorrect statement from the following w.r.t. ECG.
(A) P-wave represents the depolarization of atria.
(B) The end of T-wave marks the end of systole.
(C) By counting the QRS complexes, one can determine the heart rate.
(D) QRS complex represented the depolarization of left ventricle only.

39. How many of the following are present in the ventricles of human heart?

Eustachian valve, Chordaetendineae, Papillary muscles, Coronary sinus

(A) One (B) Two
(C) Three (D) Four

40. The part of conducting system present in ventricular wall of human heart is
(A) Sinoatrial node
(B) Purkinje fibres
(C) Atrioventricular node
(D) Internodal pathways

41. The closing of semilunar valve does not coincide with
(A) Fall in ventricular pressure
(B) Production of dub sound
(C) Ventricular diastole
(D) Attempted backflow of blood into the atria from ventricles

42. Blood from head, neck and arms enter the heart through
(A) Superior vena cava
(B) Inferior vena cava
(C) Pulmonary vein
(D) Pulmonary artery

43. Which of the following is an incorrect statement w.r.t. ECG?
(A) ECG is a graphical representation of the electrical activity of the heart during a cardiac cycle
(B) Electrocardiograph is the machine used to obtain ECG.
(C) To obtain standard ECG, a patient is connected to the machine with three electrical leads, i.e., one to each wrist and to the right ankle
(D) For a detailed evaluation, multiple leads are attached to the chest region.

44. Which of the following is incorrect w.r.t. properties of veins?
(A) They have narrow lumen.
(B) They have valve to check backflow of blood.
(C) They mostly carry deoxygenated blood.
(D) They are non-pulsatile.

45. The wall of artery is_____ and blood moves at_____ pressure.
(A) Thick, low (B) Thin, high
(C) Thick, high (D) Thin, low

46. Artificial pacemaker is used for
(A) Heart attack
(B) Atherosclerosis
(C) Angina pectoris
(D) Irregularity in heart rhythm

47. Which one of the following blood vessel carries blood from intestine to the liver before it is delivered to systemic circulation?
(A) Hepatic portal vein
(B) Hepatic vein
(C) Subclavian vein
(D) Jugular vein

48. Weakening of the wall of artery causing an abnormal bulge or ballooning of the artery is called
(A) Thrombus
(B) Embolus
(C) Aneurysm
(D) Atherosclerosis

49. Hypophysial portal vein carries blood from hypothala-mus to
(A) Anterior pituitary
(B) Posterior pituitary
(C) Thymus
(D) Liver

50. Sudden damage to heart muscles due to inadequate blood supply is called
(A) Myocardial infarction
(B) Heart failure
(C) Heart attack
(D) Both (A) and (C)